

VPDES PERMIT PROGRAM FACT SHEET

This document gives pertinent information concerning the VPDES Permit listed below. This permit is being processed as a **MINOR MUNICIPAL** permit.

1. PERMIT NO.: VA0054003 EXPIRATION DATE: 11/05/11
2. FACILITY NAME AND LOCAL MAILING ADDRESS FACILITY LOCATION ADDRESS (IF DIFFERENT)
- Sunset Bay South WWTP  
9428 Decatur Highway  
Berlin, MD 21811
- Sunset Bay South WWTP  
3855 S. Main Street  
Chincoteague, VA 23336
- CONTACT AT FACILITY: CONTACT AT LOCATION ADDRESS
- NAME: Mr. Todd Burbage NAME: Env. Systems Serv. LTD (ESS)  
TITLE: Vice-President TITLE: Plant Operator  
PHONE: (410)213-1900 PHONE: (540)-825-6660
3. OWNER CONTACT: (TO RECEIVE PERMIT) CONSULTANT CONTACT:
- NAME: Mr. Todd Burbage NAME: Donald F. Hearl, ESS  
TITLE: Vice-President FIRM NAME: Env. Systems Serv. LTD (ESS)  
COMPANY NAME: Sunset Bay South ADDRESS: 218 N. Main Street  
ADDRESS: 9428 Stephen Decatur Hwy Culpeper, VA 22701  
Berlin, MD 21811 PHONE: (540)-825-6660  
PHONE: (410)-213-1900
4. PERMIT DRAFTED BY: DEQ, Water Permits, Regional Office
- Permit Writer(s): R. E. Smithson Date(s): 07/06/11  
Reviewed By: M. H. Sauer Date(s): 07/26/11
5. PERMIT ACTION:
- ( ) Issuance (X) Reissuance ( ) Revoke & Reissue ( ) Owner Modification  
( ) Board Modification ( ) Change of Ownership/Name [Effective Date: ]
6. SUMMARY OF SPECIFIC ATTACHMENTS LABELED AS:
- Attachment 1 Site Inspection Report/Memorandum  
Attachment 2 Discharge Location/Topographic Map  
Attachment 3 Schematic/Plans & Specs/Site Map/Outfall Description  
Attachment 4 TABLE II - Effluent Monitoring/Limitations  
Attachment 5 Effluent Limitations/Monitoring Rationale/Suitable  
Data/Antidegradation/Antibacksliding  
Attachment 6 Closure Plan For Financial Assurance  
Attachment 7 Special Conditions Rationale  
Attachment 8 Receiving Waters Info./Tier Determination/303(d) Listed Segments  
Attachment 9 TABLE III(a) and TABLE III(b) - Change Sheets  
Attachment 10 EPA Permit Checklist  
Attachment 11 Chronology Sheet  
Attachment 12 Correspondence

APPLICATION COMPLETE: 06/28/11 (DSS comments)

7. PERMIT CHARACTERIZATION: (Check as many as appropriate)

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Existing Discharge | <input checked="" type="checkbox"/> Effluent Limited        |
| <input type="checkbox"/> Proposed Discharge            | <input checked="" type="checkbox"/> Water Quality Limited   |
| <input checked="" type="checkbox"/> Municipal          | <input type="checkbox"/> WET Limit                          |
| SIC Code(s) 4952                                       | <input type="checkbox"/> Interim Limits in Permit           |
| <input type="checkbox"/> Industrial                    | <input type="checkbox"/> Interim Limits in Other Document   |
| SIC Code(s)  | <input type="checkbox"/> Compliance Schedule in Condition   |
| <input type="checkbox"/> POTW                          | <input type="checkbox"/> Site Specific WQ Criteria          |
| <input type="checkbox"/> PVOTW                         | <input type="checkbox"/> Variance to WQ Standards           |
| <input checked="" type="checkbox"/> Private            | <input type="checkbox"/> Water Effects Ratio                |
| <input type="checkbox"/> Federal                       | <input type="checkbox"/> Discharge to 303(d) Listed Segment |
| <input type="checkbox"/> State                         | <input type="checkbox"/> Toxics Management Program Required |
| <input type="checkbox"/> Publicly-Owned Industrial     | <input type="checkbox"/> Toxics Reduction Evaluation        |
|  | <input type="checkbox"/> Storm Water Management Plan        |
|  | <input type="checkbox"/> Pretreatment Program Required      |
|  | <input type="checkbox"/> Possible Interstate Effect         |

8. RECEIVING WATERS CLASSIFICATION: River basin information.

Outfall No(s):001

Receiving Stream: Chincoteague Channel  
 River Mile: 3.38  
 Basin: Chesapeake Bay, Atlantic and Small Coastal  
 Subbasin: N/A  
 Section: 1b  
 Class: II  
 Special Standard(s): a  
 Tidal: Yes  
 7-Day/10-Year Low Flow: N/A  
 1-Day/10-Year Low Flow: N/A  
 30-Day/5-Year Low Flow: N/A  
 Harmonic Mean Flow: N/A

9. FACILITY DESCRIPTION: Describe the type facility from which the discharges originate.

Existing municipal discharge (115 unit condos) resulting from the discharge of treated domestic sewage, no restaurant

10. LICENSED OPERATOR REQUIREMENTS: ( ) No (X) Yes Class: III (tertiary treatment)11. RELIABILITY CLASS: I12. SITE INSPECTION DATE: 12/03/2008 REPORT DATE: 12/05/2008

SEE ATTACHMENT 1

13. DISCHARGE(S) LOCATION DESCRIPTION: Provide USGS Topo which indicates the discharge location, significant (large) discharger(s) to the receiving stream, water intakes, and other items of interest.Name of Topo: Chincoteague West Quadrant No.: 141B

SEE ATTACHMENT 2

14. ATTACH A SCHEMATIC OF THE WASTEWATER TREATMENT SYSTEM(S) [IND. & MUN.]. FOR INDUSTRIAL FACILITIES, PROVIDE A GENERAL DESCRIPTION OF THE PRODUCTION CYCLE(S) AND ACTIVITIES. FOR MUNICIPAL FACILITIES, PROVIDE A GENERAL DESCRIPTION OF THE TREATMENT PROVIDED.

Narrative: Treatment consists of an extended aeration-activated sludge package treatment plant: screen/comminutor, flow equalization, clarifier, (tertiary) sand filtration, chlorination and dechlorination.

SEE ATTACHMENT 3 (CAN ALSO REFERENCE TABLE I)

15. DISCHARGE DESCRIPTION: Describe each discharge originating from this facility.

SEE TABLE I - SEE ATTACHMENT 3

16. COMBINED TOTAL FLOW:

FINAL TOTAL: 0.0395 MGD (for public notice)

DESIGN FLOW: 0.0395 (MUN.)

17. STATUTORY OR REGULATORY BASIS FOR EFFLUENT LIMITATIONS AND SPECIAL CONDITIONS:  
(Check all which are appropriate)

☒ State Water Control Law  
☒ Clean Water Act  
☒ VPDES Permit Regulation (9 VAC 25-31-10 et seq.)  
☒ EPA NPDES Regulation (Federal Register)  
☐ EPA Effluent Guidelines (40 CFR 133 or 400 - 471)  
☒ Water Quality Standards (9 VAC 25-260-5 et seq.)  
☐ Wasteload Allocation from a TMDL or River Basin Plan

18. EFFLUENT LIMITATIONS/MONITORING: Provide all limitations and monitoring requirements being placed on each outfall.

SEE TABLE II - ATTACHMENT 5

19. EFFLUENT LIMITATIONS/MONITORING RATIONALE: Attach any analyses of an outfall by individual toxic parameter. As a minimum, it will include: statistics summary (number of data values, quantification level, expected value, variance, covariance, 97th percentile, and statistical method); wasteload allocation (acute, chronic and human health); effluent limitations determination; input data listing. Include all calculations used for each outfall and set of effluent limits and those used in any model(s). Include all calculations/documentation of any antidegradation or anti-backsliding issues in the development of any limitations; complete the review statements below. Provide a rationale for limiting internal waste streams and indicator pollutants. Attach chlorine mass balance calculations, if performed. Attach any additional information used to develop the limitations, including any applicable water quality standards calculations (acute, chronic and human health).

**OTHER CONSIDERATIONS IN LIMITATIONS DEVELOPMENT:**

**VARIANCES/ALTERNATE LIMITATIONS:** Provide justification or refutation rationale for requested variances or alternatives to required permit conditions/limitations. This includes, but is not limited to: waivers from testing requirements; variances from technology guidelines or water quality standards; WER/translator study consideration; variances from standard permit limits/conditions.

N/A

**SUITABLE DATA:** In what, if any, effluent data were considered in the establishment of effluent limitations and provide all appropriate information/calculations.

Effluent limitations are based upon BPJ and consistency with other treatment facilities discharging to the same receiving stream. All suitable data were reviewed; the facility consistently meets its tertiary effluent limitations.

**ANTIDEGRADATION REVIEW:** Provide all appropriate information/calculations for the antidegradation review.

The receiving stream has been classified as tier 2; therefore, no significant degradation of the existing water quality will be allowed. See antidegradation calculations/determinations. A TKN limit of 3.0 mg/l eliminates the concern for ammonia (refer to attachment #6).

**ANTIBACKSLIDING REVIEW:** Indicate if antibacksliding applies to this permit and, if so, provide all appropriate information. Enterococci limit on Part I.A. page removed. Limit in effect for alternate disinfection only in accordance with bacteria standards (9 VAC 25-260-170.A&B).

There are no backsliding issues to address in this permit (i.e., limits as stringent or more stringent when compared to the previous permit).

SEE ATTACHMENT 6

20. **SPECIAL CONDITIONS RATIONALE:** Provide a rationale for each of the permit's special conditions.

SEE ATTACHMENT 7

21. **TOXICS MONITORING/TOXICS REDUCTION AND WET LIMIT SPECIAL CONDITIONS RATIONALE:** Provide the justification for any toxics monitoring program and/or toxics reduction program and WET limit.

N/A

22. **SLUDGE DISPOSAL PLAN:** Provide a description of the sludge disposal plan (e.g., type sludge, treatment provided and disposal method). Indicate if any of the plan elements are included within the permit.

This facility will have sludge pumped and hauled by a septage hauler to a WWTP in Pocomoke City, MD. This plan has been included in the VPDES application (reference to details in SLUDGE Form). A standard special condition pertaining to this plan will be included in Part I of the permit.

23. **MATERIAL STORED:** List the type and quantity of wastes, fluids, or pollutants being stored at this facility. Briefly describe the storage facilities and list, if any, measures taken to prevent the stored material from reaching State waters.

NONE.

24. **RECEIVING WATERS INFORMATION:** Refer to the State Water Control Board's Water Quality Standards [e.g., River Basin Section Tables (9 VAC 25-260-5 et seq.)]. Use 9 VAC 25-260-140 C (introduction and numbered paragraph) to address tidal waters where fresh water standards would be applied or transitional waters where the most stringent of fresh or salt water standards would be applied. Attach any memoranda or other information which helped to develop permit conditions (i.e. tier determinations, PReP complaints, special water quality studies, STORET data and other biological and/or chemical data, etc.

SEE ATTACHMENT 8: Tier determination, river mile designation

25. **303(d) Listed Segments:** Indicate if the facility discharges to a segment that is listed on the current 303(d) list and, if so, provide all appropriate information/calculations.

This facility discharges directly to the Chincoteague Channel. TMDLs are not included in this permit as the receiving waters are not listed on the 303(d) list. This receiving stream segment had been listed on the 303(d) list for protection of shellfish, but has since be de-listed. SEE ATTACHMENT 8

26. **CHANGES TO PERMIT:** Use **TABLE III(a)** to record any changes from the previous permit and the rationale for those changes. Use **TABLE III(b)** to record any changes made to the permit during the permit processing period and the rationale for those changes [i.e., use for comments from the applicant, VDH, EPA, other agencies and/or the public where comments resulted in changes to the permit limitations or any other changes associated with the special conditions or reporting requirements].

SEE ATTACHMENT 9

27. **NPDES INDUSTRIAL PERMIT RATING WORKSHEET:**

N/A - This is a municipal facility.

28. **DEQ PLANNING COMMENTS RECEIVED ON DRAFT PERMIT:** Document any comments received from DEQ planning.

The discharge is not addressed in any planning document but will be included when the plan is updated.

29. **PUBLIC PARTICIPATION:** Document comments/responses received during the public participation process. If comments/responses provided, especially if they result in changes to the permit, place in the attachment.

**VDH/DSS COMMENTS RECEIVED ON DRAFT PERMIT:** Document any comments received from the Virginia Dept. of Health and noted how resolved.

The VDH waived their right to comment and/or object to the adequacy of the draft permit.

**EPA COMMENTS RECEIVED ON DRAFT PERMIT:** Document any comments received from the U.S. Environmental Protection Agency and noted how resolved.

EPA waived the right to comment and/or object to the adequacy of the draft permit.

**ADJACENT STATE COMMENTS RECEIVED ON DRAFT PERMIT:** Document any comments received from an adjacent state and noted how resolved.

Not Applicable.

**OTHER AGENCY COMMENTS RECEIVED ON DRAFT PERMIT:** Document any comments received from any other agencies (e.g., VIMS, VMRC, DGIF, etc.) and noted how resolved.

Not Applicable

OTHER COMMENTS RECEIVED FROM RIPARIAN OWNERS/CITIZENS ON DRAFT PERMIT: Document  
any comments received from other sources and note how resolved.

The application and draft permit have received public notice in accordance with the VPDES Permit Regulation, and no comments were received.

PUBLIC NOTICE INFORMATION:

Persons may comment in writing or by e-mail to the DEQ on the proposed reissuance of the permit within 30 days from the date of the first notice. Address all comments to the contact person listed below. Written or e-mail comments shall include the name, address, and telephone number of the writer, and shall contain a complete, concise statement of the factual basis for comments. Only those comments received within this period will be considered. The Director of the DEQ may decide to hold a public hearing if public response is significant. Requests for public hearings shall state the reason why a hearing is requested, the nature of the issues proposed to be raised in the public hearing and a brief explanation of how the requestor's interests would be directly and adversely affected by the proposed permit action.

All pertinent information is on file and may be inspected, and arrangements made for copying by contacting R. E. Smithson at: Department of Environmental Quality (DEQ), Tidewater Regional Office, 5636 Southern Boulevard, Virginia Beach, VA 23462. Telephone: 757-518-2106 E-mail: [robert.smithsonjr@deq.virginia.gov](mailto:robert.smithsonjr@deq.virginia.gov)

Following the comment period, the Board will make a determination regarding the proposed reissuance. This determination will become effective, unless the Director grants a public hearing. Due notice of any public hearing will be given.

30. ADDITIONAL FACT SHEET COMMENTS/PERTINENT INFORMATION:

The facility has an extended aeration-activated sludge package treatment plant followed by sand filtration to meet tertiary limitations. The previous permit had interim limits to reflect a 0.023 MGD design flow prior to final design flow of 0.0395 MGD. A CTO was issued for this final design flow in spring of 2010.

DSS commented on the reissuance application by stating the project would not cause an increase in the size or type of the existing closure. VMRC had no comments on the application.

ATTACHMENT 1

SITE INSPECTION REPORT/MEMORANDUM

Facility:	<b>SUNSET BAY UTILITIES – NORTH &amp; SOUTH</b>
County/city:	<b>CHINCOTEAGUE ISLAND</b>

VPDES NO.	<b>VA0054003 &amp; VA0091049</b>
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**DEPARTMENT OF ENVIRONMENTAL QUALITY  
WASTEWATER FACILITY  
INSPECTION REPORT  
PART 1**

Inspection date:	<b>12/3/2008</b>	Date form completed:	<b>12/5/2008</b>
Inspection by:	<b>Stephen J. Thomas</b>	Inspection agency:	<b>DEQ/TRO</b>
Time spent:	<b>4 Hours</b>	Announced Inspection:	[ ] Yes [x] No
Reviewed by:	<b>Kenneth T. Raum</b>	Photographs taken at site?	[x] Yes [ ] No
Present at inspection:	<b>John Allen - ESS</b>		
FACILITY TYPE:		FACILITY CLASS:	
(x) Municipal		( ) Major	
( ) Industrial		( ) Minor	
( ) Federal		(x) Small	
( ) VPA/NDC		( ) High Priority ( ) Low Priority	
TYPE OF INSPECTION:			
Routine	<b>x</b>	Reinspection	Compliance/assistance/complaint
Date of previous inspection:	<b>First Inspection</b>	Agency:	<b>DEQ/TRO</b>
Population Served:	Connections Served:		
Last Month Average: Influent	BOD <sub>5</sub> (mg/l)	TSS (mg/l)	Flow (MGD)
Other:			
Last Month Average: Effluent October 2008	BOD <sub>5</sub> (mg/l)	TSS (mg/l)	Flow (MGD)
Other: pH 7.5-8.4, Fecal Coliform 80 N/CML DO (min) 7.1 mg/l			
Last Quarter Average: Effluent August – October 2008	BOD <sub>5</sub> (mg/l)	TSS (mg/l)	Flow (MGD)
Other: pH 7.5-8.4 Fecal Coliform 29 N/CML DO (min) 6.8 mg/l			
Data verified in preface:	Updated?	NO CHANGES?	<b>x</b>
Has there been any new construction?		YES	NO
If yes, were the plans and specifications approved?		YES	NO
DEQ approval date:			
<b>COPIES TO: (x) DEQ/TRO; (x) DEQ/OWCP; (x) OWNER; ( ) OPERATOR; ( ) EPA-Region III; ( ) Other:</b>			



PROBLEMS IDENTIFIED AT LAST INSPECTION:		CORRECTED	NOT CORRECTED

### SUMMARY

#### INSPECTION COMMENTS:

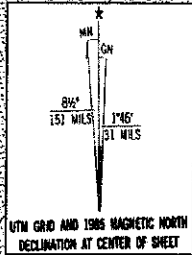
	There are two package plants at this location. The South plant is operational and serves the first phase of the
	Sunset Bay Villas. The North unit has been built, but is sitting idle at this time. This unit will be activated when
	the second phase of the Villa is complete. A CTO will be required before operations begin.
	The two package treatment units have one central discharge point into Chincoteague Channel, but at the
	present configuration they will have to be sampled as separate discharges due to the configuration of the two
	systems. The south treatment package plant was found in good operational condition at the time of the
	inspection. The pump station serving the facility does not have a current CTO. The unit is receiving minimal
	influent flow at this time. Influent flows are higher on the weekends and during the summer months at this time.
	I would like to thank Mr. John Allen, for his cooperation during the inspection.

#### COMPLIANCE RECOMMENDATIONS FOR ACTION

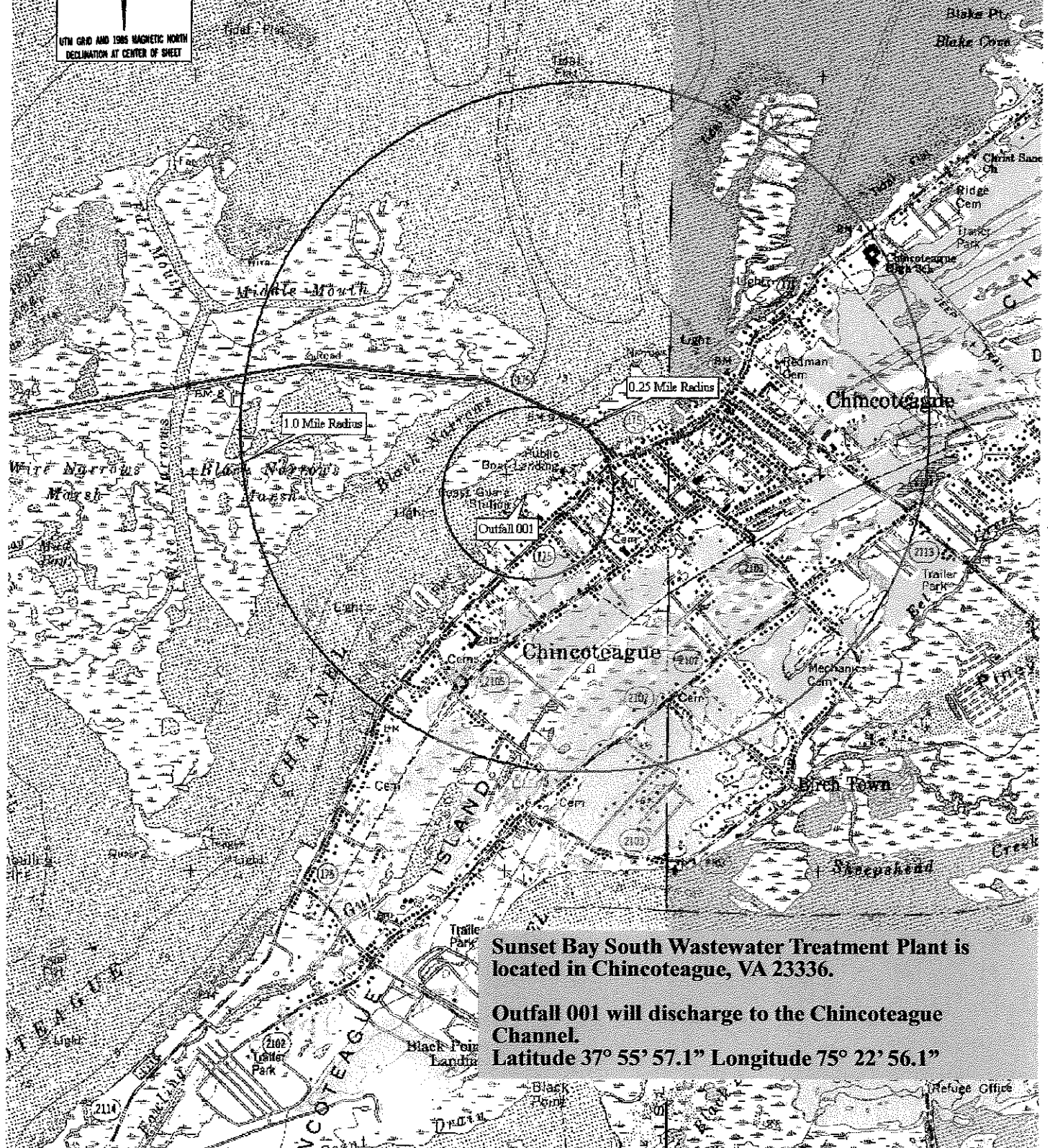
1	The current pump station needs to have a CTO (certificate to operate) performed. Items on the contractors
	punch list for the pump station must be completed before CTO can be issued.

ATTACHMENT 2

DISCHARGE LOCATION/TOPOGRAPHIC MAP



# **7.5 Minute USGS Topographic Map Chincoteague West Quadrangle**



**Sunset Bay South Wastewater Treatment Plant is located in Chincoteague, VA 23336.**

**Outfall 001 will discharge to the Chincoteague Channel.  
Latitude 37° 55' 57.1" Longitude 75° 22' 56.1"**

## ATTACHMENT 3

SCHEMATIC/PLANS & SPECS/SITE MAP/  
TABLE I-Discharge/Outfall Description

Sunset Bay South – VPDES VA54002  
Flow Diagram

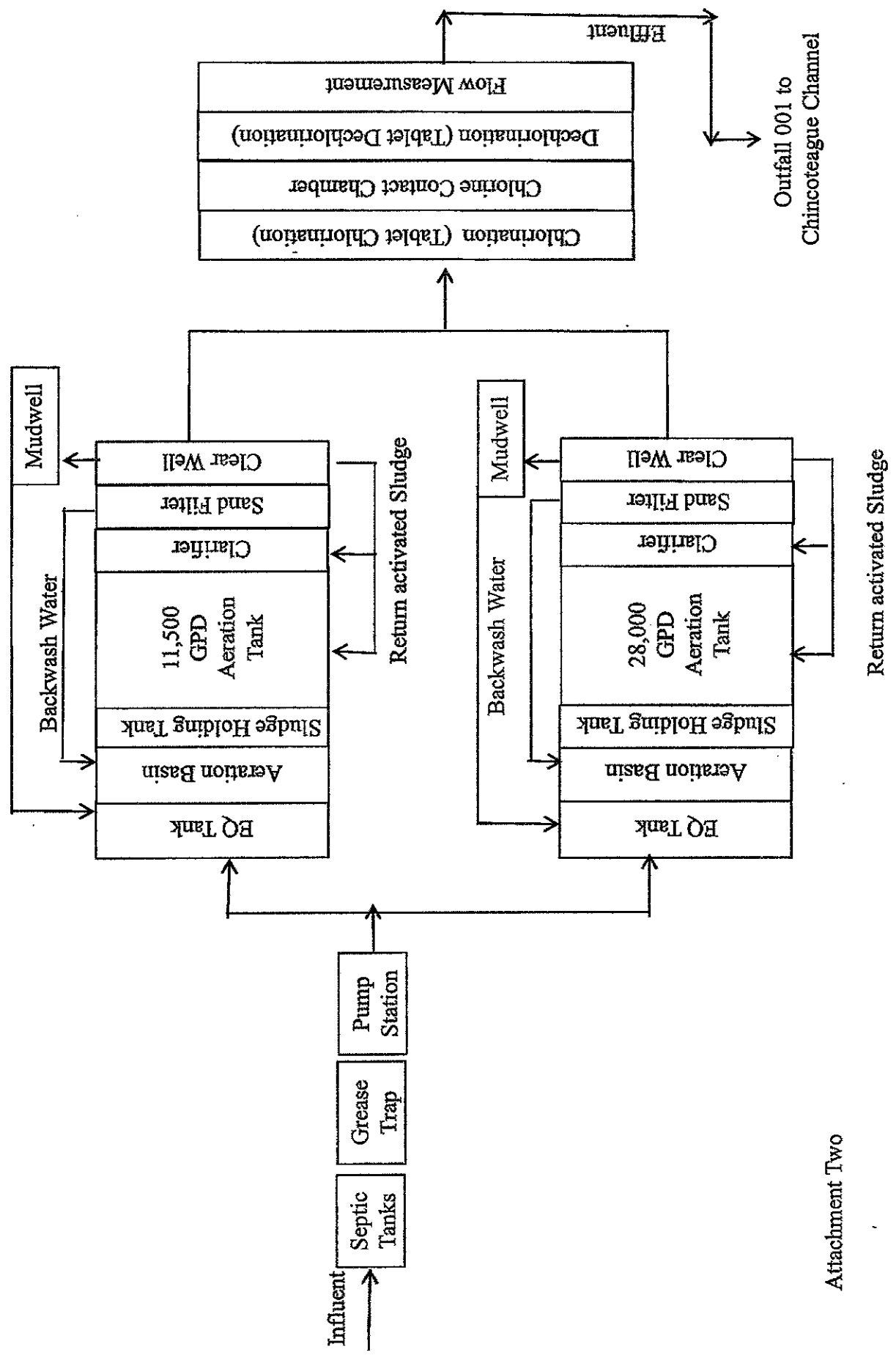


TABLE I  
NUMBER AND DESCRIPTION OF OUTFALLS

OUTFALL NO.	DISCHARGE LOCATION	DISCHARGE SOURCE (1)	TREATMENT (2)	FLOW (3)
001	37°55'57.1"N 75°22'56.1"W	Domestic wastewater from a residential condo community	Treatment consists of an extended aeration- activated sludge package treatment plant with a screen/comminutor, flow equalization, clarification, followed by tertiary filtration for nutrient removal, chlorination, dechlorination.	0.0395 MGD

- (1) List operations contributing to flow
- (2) Give brief description, unit by unit
- (3) Give maximum 30-day average flow for industry and design flow for municipal

## ATTACHMENT 4

## TABLE II - EFFLUENT MONITORING/LIMITATIONS

TABLE II - MUNICIPAL EFFLUENT LIMITATIONS/MONITORING  
ATTACHMENT 5

OUTFALL # 001 DESIGN FLOW: 0.0395 MGD

Outfall Description: Domestic wastewater from a residential condo community  
SIC CODE: 4952

(X) Final Limits ( ) Interim Limits			Effective Dates -		From: Reissuance Date		To: Expiration Date	
PARAMETER & UNITS	BASIS FOR LIMITS	DESIGN FLOW MULTIPLIER	EFFLUENT LIMITATIONS				MONITORING REQUIREMENTS	
			MONTHLY AVERAGE	WEEKLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
Flow (MGD) [a]	3	.0395	NL	NA	NA	NL	1/Day	Estimate
pH (S.U.)	3		NA	NA	6.0	9.0	1/Day	Grab
CBOD5 (mg/l) [c]	3		10	15	NA	NA	1/Month	Grab
CBOD5 (kg/d)	3	.0395	1.5	2.2	NA	NA	1/Month	Grab
TSS (mg/l) [c]	3		10	15	NA	NA	1/Month	Grab
TSS (kg/d)	3	.0395	1.5	2.2	NA	NA	1/Month	Grab
TRC (mg/l) [b] [c]	2	.0395	.005	.007	NA	NA	1/Day	Grab
Fecal Coliform (N/CML)	2		200	NA	NA	NA	1/Month (Between 10 am & 4 pm)	Grab
D.O. (mg/l)	3		NA	NA	5.0	NA	1/Day	Grab
Total Kjeldahl Nitrogen (TKN) (mg/l) [c]	3		3.0	4.5	NA	NA	1/Month	Grab
Total Kjeldahl Nitrogen (TKN) (kg/d)	3	.0395	0.45	0.67	NA	NA	1/Month	Grab



TABLE II - MUNICIPAL EFFLUENT LIMITATIONS/MONITORING  
ATTACHMENT 5

- [a] See Part I.C.6. for exceeding 95% of the design capacity 3 months consecutively.
- [b] See Part I.B. for additional chlorine limitations and bacterial effluent limitations.
- [c] See Parts I.C.7. and I.C.8. for quantification levels and reporting requirements, respectively.

NA = NOT APPLICABLE; NL = NO LIMIT, MONITORING REQUIREMENT ONLY

Upon reissuance of the permit, Discharge Monitoring Reports (DMRs) shall be submitted to the regional office at the frequency required by the permit regardless of whether an actual discharge occurs. In the event that there is no discharge for the monitoring period, then "no discharge" shall be reported on the DMR.

The bases for the limitations codes are:

1. Technology (e.g., Federal Effluent Guidelines)
2. Water Quality Standards (9 VAC 25-260 et. seq.)
3. Best Professional Judgment

TABLE II - MUNICIPAL MINOR EFFLUENT LIMITATIONS

Attachment 5 continued

Final Chlorine Limitations Effective Dates -					From: permit reissuance		To: permit expiration			
TRC **	AFTER CL2 CONTACT TANK (Dechlor. Required)			AFTER DECHLORINATION		AFTER CL2 CONTACT TANK (Dechlor. Not Required)				
	MIN.	EXC.	INST. MIN.	WKLY AVG.	INST. MAX.	PERMIT RANGE	EXC.	REPORT-ING RANGE	EX C.	TECH. MAX.
a) Non-Detect. Dechlor. Required	1.5	3	0.6 mg/l	.007 mg/l	---	NA	NA	NA	NA	NA
b) Detect. Dechlor. Required	---	---	---	---	---	NA	NA	NA	NA	NA
c) No Dechlor.	NA	NA	NA	NA	NA	---	---	---	---	---

\*Totalizing, Indicating &amp; Recording Equipment

\*\* --Chlorine mass balance  $C_w$  (W for Tidal systems): check one\_\_\_ X \_\_\_ a)  $C_w < 0.1$  mg/l [dechlor. required, non-detectable format]\_\_\_ b)  $0.1 \text{ mg/l} \leq C_w < 2.0 \text{ mg/l}$  (2.5 mg/l for PWS, Shellfish waters) [dechlor. required, detectable format]\_\_\_ c)  $C_w > 2.0 \text{ mg/l}$  (2.5 mg/l for PWS, Shellfish waters) [dechlor. not required, include a restrictive technology max. value]

The design flow of this treatment facility is 0.0395 MGD.

NA = NOT APPLICABLE; NL = NO LIMIT, MONITORING REQUIREMENT ONLY

See Part I.B. for additional TRC limitations.

ATTACHMENT 5

EFFLUENT LIMITATIONS/MONITORING  
RATIONALE/SUITABLE DATA/  
ANTIDEGRADATION/ANTIBACKSLIDING

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**ATTACHMENT 5**  
**VPDES PERMIT PROGRAM**

**Rationale for Effluent Limitations and Monitoring**

Monitoring frequency for CBOD5, TSS, TKN and fecal coliform will be 1/month and all other parameters will be monitored 1/D, based upon a design flow of 0.0395 MGD and best professional judgment. The system is designed as advanced treatment, capable of meeting limitations of 10 mg/l CBOD5, 10 mg/l TSS and 3 mg/l TKN. TRC and fecal coliform limitations are water quality based standards. Since the receiving waters have been assigned a Tier II classification, a dissolved oxygen daily average minimum of 5.0 mg/l has been established to protect the tier classification. The previous permit had interim limits to reflect a 0.023 MGD design flow prior to final design flow of 0.0395 MGD. A CTO was issued for this final design flow in spring of 2010.

The following limitations were based upon best professional judgment, with the exception of TRC, which was based upon water quality standards.

**OUTFALL 001 - Chincoteague Channel: final loadings limitations**

**Flow:** No limit; monitoring 1/day, estimate - standard requirement for a municipal permit with this design flow.

**pH:** Minimum of 6.0 s.u., maximum of 9.0 s.u. - BPJ to protect water quality in the receiving stream.

**CBOD5 & TSS:** These parameters are representative of "self sustaining effluent" limits and are consistent with discharges from near-by facilities. Monthly average limit of 10 mg/l (1.5 kg/d) and a weekly average limit of 15 mg/l (2.2 kg/d) were based upon best professional judgment and the system design to meet tertiary treatment objectives; grab sample

**TKN:** Monthly average limit of 3.0 mg/l (0.45 kg/d) and a maximum limit of 4.5 mg/l (0.67 kg/d) were based upon best professional judgment and the system design to meet tertiary treatment objectives; grab sample.

**D.O.:** Limitation of 5.0 mg/l minimum is based upon BPJ and Water Quality Standards for Class II waters; grab sample.

**TRC:** Limits of .005 mg/l monthly average and .007 mg/l weekly average are included in this permit based upon modeling results (reference attachment 5, pages 21-26 ; indicates a non-detectable Cl<sub>2</sub> limit for "self-sustaining effluent"). This is in accordance with the VPDES Permit Manual.

**Fecal Coliform:** Limit of 200 N/CML monthly avg. 1/M based upon discharge to shellfish waters; The Chincoteague Channel is listed in the Standards as "Special Standards a" - Shellfish waters. This designation required the inclusion of a fecal coliform limit in the permit. The Division of Shellfish Sanitation has no objection to the permit; grab sample

No ammonia limitation is needed since a TKN limit of 3.0 mg/l protects the receiving stream from ammonia-N toxicity (see rationale page 28 ).

**TMDLs are not included in this permit.** TMDLs are not included in this permit as the receiving waters are not listed on the 303(d) list.

**ANTIDEGRADATION REVIEW**

The receiving stream has been classified as tier 2; therefore, no significant degradation of the existing water quality will be allowed. See antidegradation calculations/determinations. Limitations will provide for the protection and maintenance of all existing uses.

There are *no antibacksliding issues* to address in this permit reissuance.

Facility = Russell Fish Seafood Company, Inc. ← CALCULATED DURING LAST REISSUANCE

Chemical = Chlorine (ug/l)

Chronic averaging period = 4

WLAa = 13

WLAc = 7.5

Q.L. = 100

# samples/mo. = 30

# samples/wk. = 7

### Summary of Statistics:

# observations = 1

Expected Value = 20000

Variance = 1440000

C.V. = 0.6

97th percentile daily values = 48668.3

97th percentile 4 day average = 33275.8

97th percentile 30 day average = 24121.0

# < Q.L. = 0

Model used = BPJ Assumptions, type 2 data

A limit is needed based on Chronic Toxicity

Maximum Daily Limit = 10.9693108803992

Average Weekly limit = 6.69903720776325

Average Monthly Limit = 5.43662262536986

ug/l .007  
ug/l .005

The data are:

20000

# ANTIDEGRADATION CALCULATIONS/BASELINES (Saltwater)

Facility: Sunset Bay Condominiums

Sunset Bay Development VA0054003

All values in ug/l unless otherwise noted

Parameter	Saltwater Criteria (SW)		Other Surface Waters Criteria	Instream Background Data (Expected value*)	Antidegradation Baseline			Water Quality Waste Load Allocation (WQ-WLA)			Antidegradation Waste Load Allocation (AD-WLA)		
	Acute	Chronic			Acute	Chronic	Human Health	Acute	Chronic	Human Health	Acute	Chronic	Human Health
METALS													
Antimony			4300				430				215000		21500
Arsenic													
Arsenic III	69	36			17.25	9		138	1800		862.5	450	
Barium													
Cadmium	43	9.3			10.75	2.325		86	465		537.5	116.25	
Chromium III													
Chromium VI	1100	50			275	12.5		2200	2500		13750	625	
Copper	5.9	3.8			1.475	0.95		11.8	190		73.75	47.5	
Iron													
Lead	240	9.3			60	2.325		480	465		3000	116.25	
Manganese													
Mercury	2.1	0.025	0.053		0.525	0.00625	0.0053	4.2	1.25	2.65	26.25	0.3125	0.265
Nickel	75	8.3	4600		18.75	2.075	460	150	415	230000	937.5	103.75	23000
Selenium	300	71	11000		75	17.75	1100	600	3550	550000	3750	887.5	55000
Silver	2.3				0.575			4.6			28.75		
Zinc	95	86			23.75	21.5		190	4300		1187.5	1075	
PESTICIDES/PCBs													
Aldrin	1.3	0.13	0.0014		0.325	0.0325	0.00014	2.6	6.5	0.07	16.25	1.625	0.007
Chlordane	0.09	0.004	0.0059		0.0225	0.001	0.00059	0.18	0.2	0.295	1.125	0.05	0.0295
Chlorpyrifos (Dursban)	0.011	0.0056			0.00275	0.0014		0.022	0.28		0.1375	0.07	
DDD			0.0084				0.00084			0.42			0.042
DDE			0.0059				0.00059			0.295			0.0295
DDT	0.13	0.001	0.0059		0.0325	0.00025	0.00059	0.26	0.05	0.295	1.625	0.0125	0.0295

# ANTIDEGRADATION CALCULATIONS/BASELINES (Saltwater)

Facility: Sunset Bay Condominiums

All values in ug/l unless otherwise noted

Parameter	Saltwater Criteria (SW)		Other Surface Waters Criteria	Instream Background Data (Expected value*)	Antidegradation Baseline			Water Quality Waste Load Allocation (WQ-WLA)			Antidegradation Waste Load Allocation (AD-WLA)		
	Acute	Chronic			Acute	Chronic	Human Health	Acute	Chronic	Human Health	Acute	Chronic	Human Health
Demeton		0.1				0.025			5			1.25	
2, 4-dichloro-phenoxy acetic acid (2, 4-D)													
Dieldrin	0.71	0.0019	0.0014		0.1775	0.000475	0.00014	1.42	0.095	0.07	8.875	0.02375	0.007
Endosulfan	0.034	0.0087	240		0.0085	0.002175	24	0.068	0.435	12000	0.425	0.10875	1200
Endrin	0.037	0.0023	0.81		0.00925	0.000575	0.081	0.074	0.115	40.5	0.4625	0.02875	4.05
Guthion		0.01				0.0025			0.5			0.125	
Heptachlor	0.053	0.0036	0.0021		0.01325	0.0009	0.00021	0.106	0.18	0.105	0.6625	0.045	0.0105
Hexachloro-cyclohexane (Lindane)	0.16	0.01	25		0.04	0.0025	2.5	0.32	0.5	1250	2	0.125	125
Kepone		0											
Malathion		0.1				0.025			5			1.25	
Mirex		0											
Parathion													
PCB-1242		0.03	0.00045			0.0075	0.000045		1.5	0.0225		0.375	0.00225
PCB-1254		0.03	0.00045			0.0075	0.000045		1.5	0.0225		0.375	0.00225
PCB-1221		0.03	0.00045			0.0075	0.000045		1.5	0.0225		0.375	0.00225
PCB-1232		0.03	0.00045			0.0075	0.000045		1.5	0.0225		0.375	0.00225
PCB-1248		0.03	0.00045			0.0075	0.000045		1.5	0.0225		0.375	0.00225
PCB-1016		0.03	0.00045			0.0075	0.000045		1.5	0.0225		0.375	0.00225
Toxaphene	0.21	0.0002	0.0075		0.0525	0.00005	0.00075	0.42	0.01	0.375	2.625	0.0025	0.0375
2-(2, 4, 5-trichloro-phenoxy) propionic acid (Silvex)													

All values in ug/l unless otherwise noted

# ANTIDEGRADATION CALCULATIONS/BASELINES (Saltwater)

Facility: Sunset Bay Condominiums

Parameter	Saltwater Criteria (SW)		Other Surface Waters Criteria	Instream Background Data (Expected value*)	Antidegradation Baseline			Water Quality Waste Load Allocation (WQ-WLA)			Antidegradation Waste Load Allocation (AD-WLA)				
					Acute	Chronic	Human Health	Acute	Chronic	Human Health	Acute	Chronic	Human Health		
		Acute			Chronic										
BASE NEUTRAL EXTRACTABLES															
Acenaphthene			2700				270			135000				13500	
Anthracene			110000				11000			5500000				550000	
Benzo (a) anthracene			0.49				0.049			24.5				2.45	
Benzo (b) fluoranthene			0.49				0.049			24.5				2.45	
Benzo (k) fluoranthene			0.49				0.049			24.5				2.45	
Benzo (a) pyrene			0.49				0.049			24.5				2.45	
Butyl benzyl phthalate			5200				520			260000				26000	
Chrysene			0.49				0.049			24.5				2.45	
Dibenz (a, h) anthracene			0.49				0.049			24.5				2.45	
Dibutyl phthalate			12000				1200			600000				60000	
1, 2-Dichloro benzene			17000				1700			850000				85000	
1, 3-Dichloro benzene			2600				260			130000				13000	
1, 4-Dichloro benzene			2600				260			130000				13000	
Diethyl phthalate			120000				12000			6000000				600000	
Di-2-Ethylhexyl phthalate			59				5.9			2950				295	



# ANTIDEGRADATION CALCULATIONS/BASELINES (Saltwater)

Facility: Sunset Bay Condominiums

All values in ug/l unless otherwise noted

Parameter	Saltwater Criteria (SW)		Other Surface Waters Criteria	Instream Background Data (Expected value*)	Antidegradation Baseline			Water Quality Waste Load Allocation (WQ-WLA)			Antidegradation Waste Load Allocation (AD-WLA)		
	Acute	Chronic			Acute	Chronic	Human Health	Acute	Chronic	Human Health	Acute	Chronic	Human Health
2, 4-Dinitro toluene			91				9.1			4550			455
Fluoranthene			370				37			18500			1850
Fluorene			14000				1400			700000			70000
Indeno (1, 2, 3-cd) pyrene			0.49				0.049			24.5			2.45
Isophorone			490000				49000			2450000			2450000
Nitrobenzene			1900				190			95000			9500
Pyrene			11000				1100			550000			55000
1, 2, 4 Trichloro-benzene			950				95			47500			4750
VOLATILES													
Benzene			710				71			35500			3550
Bromoform			3600				360			180000			18000
Carbon Tetrachloride			45				4.5			2250			225
Chlorodibromomethane			57000				5700			2850000			285000
Chloroform			4700				470			235000			23500
Dichloromethane			16000				1600			800000			80000
Dichlorobromomethane			460				46			23000			2300
1, 2-Dichloroethane			990				99			49500			4950
1, 1-Dichloroethylene			17000				1700			850000			85000

All values in ug/l unless otherwise noted

# ANTIDEGRADATION CALCULATIONS/BASELINES (Saltwater)

Facility: Sunset Bay Condominiums

Parameter	Saltwater Criteria (SW)		Other Surface Waters Criteria	Instream Background Data (Expected value*)	Antidegradation Baseline			Water Quality Waste Load Allocation (WQ-WLA)			Antidegradation Waste Load Allocation (AD-WLA)		
	Acute	Chronic			Acute	Chronic	Human	Acute	Chronic	Human Health	Acute	Chronic	Human Health
Ethylbenzene			29000				2900			1450000			145000
Monochloro-benzene			21000				2100			1050000			105000
Tetrachloro-ethylene			3500				350			175000			17500
Toluene			200000				20000			10000000			1000000
Trichloroethylene			810				81			40500			4050
Vinyl Chloride			5300				530			265000			26500
ACIDS EXTRACTABLES													
2-Chlorophenol			400				40			20000			2000
2, 4 Dichloro-phenol			790				79			39500			3950
2, 4 Dimethyl-phenol			2300				230			115000			11500
Pentachloro-phenol	13	7.9	82		3.25	1.975	8.2	26	395	4100	162.5	98.75	410
Phenol			4600000				460000			230000000			23000000
2, 4, 6-Trichloro-phenol			65				6.5			3250			325
MISCELLANEOUS													
Ammonia (as NH3-N)	**	**			#VALUE!	#VALUE!		#VALUE!	0		0	0	
Chlorides													
Chlorine (CPO)	13	7.5			3.25	1.875		26	375		162.5	93.75	
Cyanide	1	1	215000		0.25	0.25	21500	2	50	10750000	12.5	12.5	1075000
Dioxin (PPQ)			1.2				0.12			60			6

All values in ug/l unless otherwise noted

Parameter	Saltwater Criteria	Other Surface	Instream Background	Antidegradation Baseline	Water Quality Waste Load Allocation	Antidegradation Waste Load Allocation
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ANTIDEGRADATION CALCULATIONS/BASELINES (Saltwater)

Facility: Sunset Bay Condominiums

	(SW)		Waters Criteria	Data (Expected value*)	(WQ-WLA)				(AD-WLA)		
	Acute	Chronic			Acute	Chronic	Human Health	Acute	Chronic	Human Health	
Fecal Coliform (N/Cml)											
Foaming Agents (as MBAS)											
Hydrogen Sulfide		2				0.5		100		25	
Nitrate											
Sulfate											
Total Dissolved Solids											
Solids											
Tributyltin	0.36	0.001			0.09	0.00025		0.72	0.05	4.5	0.0125

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TELEPHONE DOCUMENTATION

SUBJECT : AMMONIA LIMIT CALCULATIONS UNNECESSARY WITH TKN  
SWAMP/MARSH LIMIT

WRITTEN BY: R. E. Smithson

DATE: August 18, 1993

TO : Permit Factsheet

DISCUSSION: R. M. Smith and I spoke with Fred Holt on this date concerning the need for ammonia limit calculations when swamp/marsh TKN limits apply. He informed us that a TKN limit of 3 mg/l is stringent enough to protect any receiving stream from ammonia toxicity, hence an NH<sub>3</sub> limit would be unnecessary. This applies, as well, when antidegradation is being considered because of tier 2 waters. Ammonia limit calculations using baseline data is not necessary.

CONSIDERATION: Should a draft permit include tiered TKN limits in the summer and ammonia limits in the winter to assist the permittee in meeting denitrification requirements, antidegradation may be a consideration when calculating NH<sub>3</sub>. If the receiving waters are tier 2, then NH<sub>3</sub> baseline data must be utilized.

cc: R. M. Smith,

cc: R. P. Goode

ATTACHMENT 6

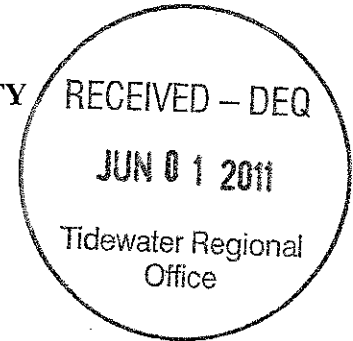
CLOSURE PLAN FOR FINANCIAL ASSURANCE  
COST ESTIMATES INCLUDED

30

**ONSITE WASTEWATER TREATMENT FACILITY  
CLOSURE PLAN**

*For*  
**Sunset Bay South  
(VA0054003)**

*Located at*  
**CHINCOTEAGUE, VIRGINIA**



*Revised: May 18, 2011*

**FACILITY DESCRIPTION**

The proposed wastewater treatment system serving the Sunset Bay South property located on Chincoteague Island consists of an above ground extended aeration, activated sludge treatment system. The facility has a design capacity to treat 39,500 gallons of wastewater per day. The treatment process includes both filtration and final treatment/disinfection steps. Since the treatment facility will serve permanent homes, it cannot be taken off line or closed permanently unless an alternative source of wastewater treatment service is made available.

**DESIGNATED THIRD PARTY**

This closure plan hereby stipulates that Environmental Systems Service, LTD (ESS) shall act as the named third party responsible for implementation of the interim operations plan. ESS will provide interim operation and maintenance services as specified in the accompanying contract. All contract exclusions relative to liability, contained in the ESS service agreement contract, shall apply. This assignment may be modified or terminated at any time by the named third party. ESS is an independent Virginia contractor and has no affiliation with or ownership of this facility.

**INTERIM FACILITY OPERATION**

The operator has obtained a written proposal from Environmental Systems Service, Ltd., a Virginia Corporation providing professional wastewater operations and maintenance services, agreeing to provide continuing plant operations and maintenance services for a period of two (2) years. In the event that the onsite wastewater treatment facility is abandoned by the owner and operator, ongoing operations and maintenance services will proceed under the terms of the contract with ESS and in accordance with this closure plan. This treatment facility will serve a new permanent housing development. Since the facility will serve a full time residential community, the system cannot be closed permanently unless central sewerage becomes available. Central sewerage is not planned for the area in which the development is located.

**CLOSURE COST ESTIMATE**

As noted, the treatment facility serves a permanent residential community. Since there is no alternative source of wastewater treatment service on the island, closure of this facility is not possible or likely. Only in the event of the provision of central sewerage by the

Town could the treatment system be closed and taken off line. Based on comments received relative to this subject, it is unlikely that central sewage treatment will come to Chincoteague for many years. When and if this happens, and if the owners wish to connect to the system, the existing treatment facility could then be closed. The cost for plant closure is considered an estimate and is based on current projections.

## RECORDS AND HISTORICAL DATA

All records, laboratory bench sheets, plant logs, etc., will be secured appropriately to maintain integrity and prevent deterioration during the interim period of operation.

## INTERIM O&M COST ESTIMATE

The following summary is intended to provide an accurate cost to sustain ongoing operations and maintenance of the treatment facility for a period of 24 months. An additional cost estimate is provided for closure of the facility. The security posted by the owner shall include the cost for providing twenty-four months of operations & maintenance service and the estimated closure costs. The security will be renewed and updated to keep pace with inflation on a regular basis. The cost summary will be reviewed 60 days prior to the anniversary date of the financial assurance mechanism. It will be revised and updated as needed.

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
<b>O&amp;M</b>					
Staffing	28800	29664	30554	31471	32415
Laboratory, analytical	3704	3815	3930	4047	4169
Electricity	9600	9888	10185	10490	10805
Laboratory, supplies	1200	1236	1273	1311	1351
Process chemicals	7400	7622	7851	8086	8329
Maintenance	3000	3090	3183	3278	3377
Sludge disposal	4000	4120	4244	4371	4502
Annual VPDES permit fee	1600	1648	1697	1748	1801
<b>Estimated Annual Cost</b>	<b>59304</b>	<b>61083</b>	<b>62916</b>	<b>64803</b>	<b>66747</b>
<b>CLOSURE</b>					
Plant dewatering via pump & haul	8000	8240	8487	8742	9004
Mob/Demob	1000	1030	1061	1093	1126
Covering & securing tankage	7500	7725	7957	8195	8441
<b>Estimated Closure Cost</b>	<b>16500</b>	<b>16995</b>	<b>17505</b>	<b>18030</b>	<b>18571</b>
<b>Estimated Cost w/ 24 Month</b>					
<b>O&amp;M &amp; Closure</b>	<b>\$ 135,108</b>	<b>\$ 139,161</b>	<b>\$ 143,336</b>	<b>\$ 147,636</b>	<b>\$ 152,065</b>

*\* Including a projected 3 % inflation escalator per year and the closure cost estimate.*

The foregoing plan for ensuring uninterrupted O&M service for the subject treatment facility should satisfy the regulatory requirement for posting financial assurance.

ATTACHMENT 7

SPECIAL CONDITIONS RATIONALE



VPDES PERMIT PROGRAM  
LIST OF SPECIAL CONDITIONS RATIONALE

Attachment 7

B. Additional Total Residual Chlorine (TRC) Limitations and Monitoring Requirements

Rationale: Required by Water Quality Standards, 9VAC 25-260-170, Fecal coliform bacteria; other waters. Also, 40 CFR 122.41(e) requires the permittee, at all times, to properly operate and maintain all facilities and systems of treatment in order to comply with the permit. This ensures proper operation of chlorination equipment to maintain adequate disinfection.

C. OTHER REQUIREMENTS OR SPECIAL CONDITIONS

C.1.a. Sludge Reopener

Rationale: Required by the VPDES Permit Regulation, 9 VAC 25-31-220 C., and 40 CFR 122.44 (c)(4), which note that all permits for domestic sewage treatment plants (including sludge-only facilities) include any applicable standard for sewage sludge use or disposal promulgated under section 405(d) of the Clean Water Act.

C.1.b. Financial Assurance Reopener

Rationale: The State Water Control Law, Section 62.1-44.18:3, and the Closure Plans and Demonstration of Financial Capability Regulation, 9 VAC 25-650-10 et. seq., require owners of privately-owned sewerage systems which discharge more than 1000 gallons per day and less than 40,000 gallons per day to file with the Board an abatement/closure plan to be implemented in the event the facility ceases operations. The plan is required to include a demonstration of financial capability for its implementation.

C.2. Licensed Operator Requirement

Rationale: The Permit Regulation, 9 VAC 25-31-200 D and Code of Virginia 54.1-2300 et. seq., Rules and Regulations for Waterworks and Wastewater Works Operators (18 VAC 160-20-10 et seq.) requires licensure of operators.

C.3. Reliability Class

Rationale: Required by Sewage Collection and Treatment Regulations, 12 VAC 5-581-20 and 120 for all municipal facilities.

C.4. Financial Assurance and Disclosure to Purchasers

Rationale: Required by Code of Virginia § 62.1-44.18:3 and the Board's Financial Assurance Regulation, 9 VAC 25-650-10 et seq.

C.5. CTC, CTO and O & M Manual Requirements

Rationale: Required by the State Water Control Law, Section 62.1-44.19; the Sewage Collection and Treatment Regulations (12 VAC 5-581 et seq); Section 401 of the Clean Water Act; 40 CFR 122.41(e); and the VPDES Permit Regulation (9 VAC-25-31-190E).

VPDES PERMIT PROGRAM  
LIST OF SPECIAL CONDITIONS RATIONALE  
Attachment 7 continued

C.6. 95% Design Capacity Notification

Rationale: Required by the VPDES Permit Regulation, 9 VAC 25-31-200 B.2. for all POTW and PVOTW permits. Best professional judgement is used to apply this condition to other (private) municipal treatment facilities.

C.7. Quantification Levels Under Part I.A.

Rationale: States are authorized to establish monitoring methods and procedures to compile and analyze data on water quality, as per 40 CFR part 130, Water Quality Planning and Management, subpart 130.4.

C.8. Compliance Reporting Under Part I.A.

Rationale: Defines reporting requirements for toxic parameters with quantification levels and other limited parameters to ensure consistent, accurate reporting on submitted reports.

C.9. Sludge Management Plan

Rationale: The VPDES Permit Regulation, 9 VAC 25-31-420, and 40 CFR 503.1 specify the purpose and applicability for sludge management plans. The VPDES Permit Regulation, 9 VAC 25-31-100 J.4., also sets forth certain detailed information which must be included in a sludge management plan. The VPDES sewage sludge permit application form and its attachments constitute the sludge management plan and will be considered for approval with the VPDES permit. In addition, the Biosolids Use Regulation, 12 VAC 5-585-330 and 340, specifies the general purpose and control requirements for an O&M manual in order to facilitate proper O&M of the facilities to meet the requirements of the regulation.

## ATTACHMENT 8

RECEIVING WATERS INFO./  
TIER DETERMINATION/303(d) LISTING

# Planning Permit Review

36

**Date:** 6/2/2011

**To:** Kristie Britt, TRO

**Permit Writer:** RE Smithson

**Facility:** Sunset Bay South WWTP

**Permit Number:** VA0054003

**Issuance, Reissuance or Modification (if Modification describe):** reissuance

**Permit Expiration Date:** 11/5/2011

**Waterbody ID ( ex: VAT-G15E):** VAT-D01E

**Topo Name:** Chincoteage West 141B

**Facility Address:** 3855 S. Main Street, Chincoteague, VA 23336

**Receiving Stream:** Attached are topographic maps showing facility property boundaries and outfall(s) locations for those included in this request.

<b>Stream Name:</b> Chincoteague Channel	
Click here to enter text.	
<b>Stream Data Requested?</b> Click here to enter text.	
<b>Outfall #:</b> Click here to enter text.	<b>Lat Lon:</b> Click here to enter text.
<b>Outfall #:</b> Click here to enter text.	<b>Lat Lon:</b> Click here to enter text.
<b>Outfall #:</b> Click here to enter text.	<b>Lat Lon:</b> Click here to enter text.
<b>Stream Name (2):</b> Click here to enter text.	
Click here to enter text.	
<b>Stream Data Requested?</b> Click here to enter text.	
<b>Outfall #:</b> Click here to enter text.	<b>Lat Lon:</b> Click here to enter text.
<b>Outfall #:</b> Click here to enter text.	<b>Lat Lon:</b> Click here to enter text.
<b>Outfall #:</b> Click here to enter text.	<b>Lat Lon:</b> Click here to enter text.

If greater than 2 receiving streams or 3 outfalls per stream please provide a separate table with outfall listings and Latitude Longitude description.

## Planning Review:

<b>303 (d): Indicate Outfalls which discharge directly to an impaired (Category 5) stream segment and parameters impaired</b>	
Outfall 001 does not discharge to a 303d listed segment.	
Click here to enter text.	
<b>Tier Determination</b>	
Tier	Tier 2 since water quality at Station 7-CHI003.57 within AU VAT-D01E_CHI01A06 is better than water quality standards. Attachment 1.
Tier	Click here to enter text.
<b>Management Plan</b>	
Is the facility Referenced in a Management Plan?	NO
Are limits contained in a Management Plan?	NO

**Review will be completed in 30 days of receipt of request.**

## Additional Comments:

Has facility been removed from 303d list? Please provide all Planning review answers. KNB 6/13/2011: In 2006 the shellfish impairment was delisted (DELIST - VDH Shellfish Restriction - VAT-D01E-18) based on VDH-DSS change to an administrative condemnation area.
--

that the wasteload allocations and permit requirements for both type waters are the same and they are both grouped under tier 1 for implementation.

**Tier 1** waters are defined as those waters wherein one or more standards are not being attained or wherein the existing quality, under critical conditions, is equal to but does not exceed one or more applicable criteria. Information that may be used to establish this tier includes:

- Data collected from the segment of stream being considered that demonstrate that one or more standards are violated or are just barely being met (note exceptions above for fecal coliform and temperature). This demonstration must be outside any mixing zones.
- Data collected for an existing effluent that indicates the need for a more stringent limit than currently exists indicates that the standard is not currently being attained by the effluent under consideration. Thus the water would be tier 1.
- Default assumptions for ammonia that indicate the need for a more stringent limit than currently exists indicates that the ammonia standard is not currently being attained by the effluent under consideration; thus, the water is tier 1.
- An existing water quality based permit limit that was obtained through mathematical modeling may indicate that the effluent under consideration allows the standard to be just barely met in the receiving waters for the parameter modeled, *e.g.* a predicted D.O. of 5.0.

Note: this does not apply to fecal coliform or to effluent limits adopted as special standards (*e.g.* Potomac Embayment Standards).

- Biological data that demonstrate in stream toxicity.
- Judgement based on the presence of definitely identified sources of pollutants or demonstrated use impairment. Such judgement must be justified and documented. An example might be a water supply reservoir where it is known that algicides are routinely applied.

**Tier 2** waters are defined as those waters wherein the existing quality is better than the standards for all parameters that the Board has adopted criteria for (except fecal coliform and temperature for class V waters, see notes above).

If data or information is not available to make a determination, the stream is assumed to be tier 2. Public water supplies and trout streams are assumed to be tier 2 unless information is available to indicate otherwise.

**Tier 3** waters are those waters so designated by the Board. These waters are listed in 9 VAC 25-260-30.3.c. If waters are not listed in 9 VAC 25-260-30.3.c, then they are not tier 3.


Once the appropriate tier is assigned, the finding should be documented for future reference. The method for doing this is not recommended since it will vary from region to region. The only guidance is that they should be readily available to future permit writers.

COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
Division of Water Permit Coordination  
629 E. Main Street      Richmond, VA 23240

MEMORANDUM

**SUBJECT:** Guidance Memo No. 00-2011; Guidance on Preparing VPDES Permit Limits

**TO:** Regional Directors

**FROM:** Larry G. Lawson 

**DATE:** August 24, 2000

**COPIES:** David Paylor, Martin Ferguson, Alan Pollock Jean Gregory, Regional Office Permit Managers, Regional Office Water Permit Managers, Regional Office Compliance and Enforcement Managers, OWPP staff

The purpose of this guidance is to replace/update Guidance Memo No. 93 - 015 "Guidance on Preparing VPDES Permits Based on the Water Quality Standards for Toxics"

This guidance was last updated in 1993. Modifications to the water quality standards (WQS) make it necessary to update the guidance. This guidance replaces all previous guidance on the subjects covered herein. Specifically it updates or replaces the following guidance:

- 91-002 Use of WQS in the VPDES Permit Program
- 91-011 Selection of Sample Types for VPDES Monitoring
- 91-016 Use of Existing WQSA Criteria for Silver and Phenol
- 92-012 Guidance on Use of WQS for Toxics in VPDES Permits
- 92-012a Modification of 92-012
- 930-15 Guidance on Preparing VPDES Permits Based on the Water Quality Standards for Toxics
- 93-021 Antidegradation Implementation Guidance
- 94-008 Metals Monitoring, Monitoring Special Condition TOMP Revisions, & Di-2-Ethylhexyl Phthalate
- 95-012 pH Limits in the VPDES Permits for Cooling Water Outfalls

**Note to Users:** This document is provided as guidance and, as such, sets forth standard operating procedures for the agency. However, It does not mandate any particular method nor does it prohibit any particular method for the analysis of data, establishment of a wasteload allocation, or establishment of a permit limit. If alternative proposals are made, such proposals should be reviewed and accepted or denied based on their technical adequacy and compliance with appropriate laws and regulations.

Dale Phillips is the contact person if you or your permit managers have any questions.

Voice: 804-698-4077

Fax: 804-698-4032

E-mail: [mdphillips@deq.state.va.us](mailto:mdphillips@deq.state.va.us)

**Date:** 6/2/2011

**To:** Jennifer Howell, TRO JSH 6/13/2011

**Permit Writer:** RE Smithson

**Facility:** Sunset Bay South Wastewater Treatment Plant

**Permit Number:** VA0054003

**Issuance, Reissuance or Modification (if Modification describe) :** reissuance

**Permit Expiration Date:** 11/5/2011

**Waterbody ID (ex: VAT-G15E):** VAT-DO1E

**Topo Name:** Chincoteague West 141B

**Facility Address:**

3855 S. Main Street, Chincoteague, VA 23336

**Receiving Stream:** Attached are topographic maps showing facility property boundaries and outfall(s) locations for those included in this request.

<b>Stream Name:</b> Chincoteague Channel	
Click here to enter text.	
<b>Outfall #:</b> 001	<b>Lat Lon:</b> 375557.1
<b>Outfall #:</b> 001	<b>Lat Lon:</b> 752256.1
<b>Outfall #:</b> Click here to enter text.	<b>Lat Lon:</b> Click here to enter text.
<b>Stream Name (2):</b> Click here to enter text.	
Click here to enter text.	
<b>Outfall #:</b> Click here to enter text.	<b>Lat Lon:</b> Click here to enter text.
<b>Outfall #:</b> Click here to enter text.	<b>Lat Lon:</b> Click here to enter text.
<b>Outfall #:</b> Click here to enter text.	<b>Lat Lon:</b> Click here to enter text.

If greater than 2 receiving streams or 3 outfalls per stream please provide a separate table with outfall listings and Latitude Longitude description.

**Is there a design flow change? If yes give the change.** no

### TMDL Review:

<b>Is a TMDL IN PROGRESS for the receiving stream?</b> NO	
<b>Has a TMDL been APPROVED that includes the receiving stream?</b>	
NO	
<b>If yes, Include TMDL Name, Pollutant(s) and date of approval:</b>	
NA	
<b>Is the facility assigned a WLA from the TMDL?</b>	NO
<b>If Yes, what is the WLA?</b>	
NA	

Review will be completed in 30 days of receipt of request.

### Additional Comments:

A nutrient TMDL is being developed for the Maryland portion of Chincoteague Bay by the MDE. However, this is not a joint TMDL and VA does not intend to place any restrictions on VA watershed based on the MD report. See email below:

---

**From:** Lazarus, David (DEQ)  
**Sent:** Wednesday, May 18, 2011 10:52 AM  
**To:** 'Drago.Helene@epamail.epa.gov'  
**Subject:** FW: Chincoteague Bay Coordination

Helene, see note from Mark Barath, below, specifically the next to last paragraph concerning TMDLs. My assumption is that if MD completes a TMDL, a boundary condition would be established at the state line, and that VA, if an impairment arose in VA waters, would use same as input for our TMDL development. We still have not heard what MDs intention is. One issue is that MDs stds may be more restrictive than ours-how do we deal with that? At this point in time, our assessment folks have not, and are not listing VA portion.

Sorry for the ramble.

Dave

David S. Lazarus  
Watershed Program Manager  
Office of Water Quality Programs  
VA DEQ  
Phone: 804-698-4299  
Email: [david.lazarus@deg.virginia.gov](mailto:david.lazarus@deg.virginia.gov)

---

**From:** [Drago.Helene@epamail.epa.gov](mailto:Drago.Helene@epamail.epa.gov) [<mailto:Drago.Helene@epamail.epa.gov>]  
**Sent:** Tuesday, May 31, 2011 1:03 PM  
**To:** Lazarus, David (DEQ)  
**Cc:** [Voigt.Gregory@epamail.epa.gov](mailto:Voigt.Gregory@epamail.epa.gov); [garcia.maria@epa.gov](mailto:garcia.maria@epa.gov); [Barath.Mark@epamail.epa.gov](mailto:Barath.Mark@epamail.epa.gov)  
**Subject:** Re: FW: Chincoteague Bay Coordination

Sorry David. My emails get away from me sometimes.

Here's what I know about the Chincoteague Bay TMDL in MD. The TMDL is for the coastal bays including Chincoteague. It will interpret MDs narrative chlorophyll a standard and the DO standard. MD plans to incorporate any VA load in the TMDL as background and an upstream load (not a WLA). Because Va's load will be part of the "background" there won't be any VA reductions required. MD plans to have the draft available sometime this summer and should be providing a copy to you and I during that time. I expect that will be our best opportunity to provide any comments/concerns to MD.

I have talked to Mark to discuss some of his concerns about the TMDL and I think his questions have been answered.

Let me know if you have any more questions. I promise to be more timely in my response!

Helene Drago  
TMDL Program Manager  
USEPA- Region III  
Water Protection Division 3WP30  
1650 Arch Street  
Philadelphia, PA 19103  
215-814-5796  
[drago.helene@epa.gov](mailto:drago.helene@epa.gov)



ATTACHMENT 9

TABLE III (a) AND TABLE III (b) -  
CHANGE SHEETS

TABLE III(a)

VPDES PERMIT PROGRAM  
Permit Processing Change Sheet

1. Effluent Limits and Monitoring Schedule: (List any changes FROM PREVIOUS PERMIT and give a brief rationale for the changes).

OUTFALL NUMBER	PARAMETER CHANGED	MONITORING LIMITS CHANGED FROM / TO	EFFLUENT LIMITS CHANGED FROM / TO	RATIONALE	DATE & INITIAL

OTHER CHANGES:	RATIONALE:	DATE & INITIAL
Addition of Financial Assurance Reopener and Financial Assurance and Disclosure to Purchasers special condition	Standard conditions for facilities that require financial assurance provisions	RES
Remove TMDL Reopener	Delisted-condition no longer applicable	07/06/11
Remove bacterial effluent limitations and monitoring requirements-additional instructions special condition	Demo study no longer a requirement- limit in effect for alternate disinfection only in accordance with bacteria standards (9 VAC 25-260-170.A&B)	RES
		07/06/11

TABLE III (b)

VPDES PERMIT PROGRAM  
Permit Processing Change Sheet

1. Effluent Limits and Monitoring Schedule: (List any changes MADE DURING PERMIT PROCESS and give a brief rationale for the changes).

**Not Applicable**

OUTFALL NUMBER	PARAMETER CHANGED	MONITORING LIMITS CHANGED FROM / TO	EFFLUENT LIMITS CHANGED FROM / TO	RATIONALE	DATE & INITIAL

OTHER CHANGES FROM:	CHANGED TO:	DATE & INITIAL

ATTACHMENT 10

EPA PERMIT CHECKLIST

**Part I. Virginia Draft Permit Submission Checklist**  
**State "Transmittal Checklist" to Assist in Targeting**  
**Municipal and Industrial Individual NPDES Draft Permits for Review**

In accordance with the MOA established between the Commonwealth of Virginia and the United States Environmental Protection Agency, Region III, the Commonwealth submits the following draft National Pollutant Discharge Elimination System (NPDES) permit for Agency review and concurrence.

Facility Name: Sunset Bay Development

NPDES Permit Number: VA0054003

Permit Writer Name: Robert E. Smithson

Date: 07/06/11

Major ☐ Minor ☒ Industrial ☐ Municipal ☒ TMDL Related ☐

**I.A. Draft Permit Package Submittal Includes:**

	Yes	No	N/A
1. Permit Application?	X		
2. Complete Draft Permit (for renewal or first time permit – entire permit, including boilerplate information)?	X		
3. Copy of Public Notice?		X	
4. Complete Fact Sheet?	X		
5. A Priority Pollutant Screening to determine parameters of concern?			X
6. A Reasonable Potential analysis showing calculated WQBELs?	X		
7. Dissolved Oxygen calculations?		X	
8. Whole Effluent Toxicity Test summary and analysis?			X
9. Permit Rating Sheet for new or modified industrial facilities?			X

I.B. Permit/Facility Characteristics

	Yes	No	N/A
1. Is this a new, or currently unpermitted facility?		X	
2. Are all permissible outfalls (including combined sewer overflow points, non-process water and storm water) from the facility properly identified and authorized in the permit?	X		
3. Does the fact sheet or permit contain a description of the wastewater treatment process?	X		

I.B. Permit/Facility Characteristics – cont.

	Yes	No	N/A
4. Does the review of PCS/DMR data for at least the last 3 years indicate significant non-compliance with the existing permit?		X	

5. Has there been any change in streamflow characteristics since the last permit was developed?		X	
6. Does the permit allow the discharge of new or increased loadings of any pollutants?		X	
7. Does the fact sheet <b>or</b> permit provide a description of the receiving water body(s) to which the facility discharges, including information on low/critical flow conditions and designated/existing uses?	X		
8. Does the facility discharge to a 303(d) listed water?		X	
a. Has a TMDL been developed and approved by EPA for the impaired water?		X	
b. Does the record indicate that the TMDL development is on the State priority list and will most likely be developed within the life of the permit?		X	
c. Does the facility discharge a pollutant of concern identified in the TMDL or 303(d) listed water?			X
9. Have any limits been removed, or are any limits less stringent, than those in the current permit?		X	
10. Does the permit authorize discharges of storm water?		X	
11. Has the facility substantially enlarged or altered its operation or substantially increased its flow or production?		X	
12. Are there any production-based, technology-based effluent limits in the permit?		X	
13. Do any water quality-based effluent limit calculations differ from the State's standard policies or procedures?		X	
14. Are any WQBELs based on an interpretation of narrative criteria?			X
15. Does the permit incorporate any variances or other exceptions to the State's standards or regulations?		X	
16. Does the permit contain a compliance schedule for any limit or <b>condition</b> ?		X	
17. Is there a potential impact to endangered/threatened species or their habitat by the facility's discharge(s)?		X	
18. Have impacts from the discharge(s) at downstream potable water supplies been evaluated?			X
19. Is there any indication that there is significant public interest in the permit action proposed for this facility?		X	
20. Have previous permit, application, and fact sheet been examined?	X		

## Part II. NPDES Draft Permit Checklist

### Region III NPDES Permit Quality Checklist – for POTWs

(To be completed and included in the record for POTWs and other municipals)

#### II.A. Permit Cover Page/Administration

	Yes	No	N/A
1. Does the fact sheet or permit describe the physical location of the facility, including latitude and longitude (not necessarily on permit cover page)?	X		
2. Does the permit contain specific authorization-to-discharge information (from where to where, by whom)?	X		

#### II.B. Effluent Limits - General Elements

	Yes	No	N/A
1. Does the fact sheet describe the basis of final limits in the permit (e.g., that a comparison of technology and water quality-based limits was performed, and the most stringent limit selected)?	X		
2. Does the fact sheet discuss whether "antibacksliding" provisions were met for any limits that are less stringent than those in the previous NPDES permit?	X		

#### II.C. Technology-Based Effluent Limits (POTWs)

	Yes	No	N/A
1. Does the permit contain numeric limits for <u>ALL</u> of the following: BOD (or alternative, e.g., CBOD, COD, TOC), TSS, and pH?	X		
2. Does the permit require at least 85% removal for BOD (or BOD alternative) and TSS (or 65% for equivalent to secondary) consistent with 40 CFR Part 133?	X		
a. If no, does the record indicate that application of WQBELs, or some other means, results in more stringent requirements than 85% removal or that an exception consistent with 40 CFR 133.103 has been approved?			X
3. Are technology-based permit limits expressed in the appropriate units of measure (e.g., concentration, mass, SU)?	X		
4. Are permit limits for BOD and TSS expressed in terms of both long term (e.g., average monthly) and short term (e.g., average weekly) limits?	X		
5. Are any concentration limitations in the permit less stringent than the secondary treatment requirements (30 mg/l BOD5 and TSS for a 30-day average and 45 mg/l BOD5 and TSS for a 7-day average)?		X	
a. If yes, does the record provide a justification (e.g., waste stabilization pond, trickling filter, etc.) for the alternate limitations?			X

#### II.D. Water Quality-Based Effluent Limits

	Yes	No	N/A
1. Does the permit include appropriate limitations consistent with 40 CFR 122.44(d) covering State narrative and numeric criteria for water quality?	X		
2. Does the fact sheet indicate that any WQBELs were derived from a completed and EPA approved TMDL?			X

**II.D. Water Quality-Based Effluent Limits – cont.**

	Yes	No	N/A
3. Does the fact sheet provide effluent characteristics for each outfall?	X		
4. Does the fact sheet document that a “reasonable potential” evaluation was performed?	X		
a. If yes, does the fact sheet indicate that the “reasonable potential” evaluation was performed in accordance with the State’s approved procedures?	X		
b. Does the fact sheet describe the basis for allowing or disallowing in-stream dilution or a mixing zone?			X
c. Does the fact sheet present WLA calculation procedures for all pollutants that were found to have “reasonable potential”?	X		
d. Does the fact sheet indicate that the “reasonable potential” and WLA calculations accounted for contributions from upstream sources (i.e., do calculations include ambient/background concentrations)?			X
e. Does the permit contain numeric effluent limits for all pollutants for which “reasonable potential” was determined?	X		
5. Are all final WQBELs in the permit consistent with the justification and/or documentation provided in the fact sheet?	X		
6. For all final WQBELs, are BOTH long-term AND short-term effluent limits established?	X		
7. Are WQBELs expressed in the permit using appropriate units of measure (e.g., mass, concentration)?	X		
8. Does the record indicate that an “antidegradation” review was performed in accordance with the State’s approved antidegradation policy?	X		

II.E. Monitoring and Reporting Requirements

	Yes	No	N/A
1. Does the permit require at least annual monitoring for all limited parameters and other monitoring as required by State and Federal regulations?	X		
a. If no, does the fact sheet indicate that the facility applied for and was granted a monitoring waiver, AND, does the permit specifically incorporate this waiver?			
2. Does the permit identify the physical location where monitoring is to be performed for each outfall?	X		
3. Does the permit require at least annual influent monitoring for BOD (or BOD alternative) and TSS to assess compliance with applicable percent removal requirements?		X	
4. Does the permit require testing for Whole Effluent Toxicity?			X

II.F. Special Conditions

	Yes	No	N/A
1. Does the permit include appropriate biosolids use/disposal requirements?	X		
2. Does the permit include appropriate storm water program requirements?			X



**II.F. Special Conditions – cont.**

	Yes	No	N/A
3. If the permit contains compliance schedule(s), are they consistent with statutory and regulatory deadlines and requirements?			X
4. Are other special conditions (e.g., ambient sampling, mixing studies, TIE/TRE, BMPs, special studies) consistent with CWA and NPDES regulations?	X		
5. Does the permit allow/authorize discharge of sanitary sewage from points other than the POTW outfall(s) or CSO outfalls [i.e., Sanitary Sewer Overflows (SSOs) or treatment plant bypasses]?		X	
6. Does the permit authorize discharges from Combined Sewer Overflows (CSOs)?		X	
a. Does the permit require implementation of the “Nine Minimum Controls”?			X
b. Does the permit require development and implementation of a “Long Term Control Plan”?			X
c. Does the permit require monitoring and reporting for CSO events?			X
7. Does the permit include appropriate Pretreatment Program requirements?			X

II.G. Standard Conditions

II.G. Standard Conditions	Yes	No	N/A
1. Does the <b>permit</b> contain all 40 CFR 122.41 standard conditions or the State equivalent (or more stringent) conditions?	X		
<b>List of Standard Conditions – 40 CFR 122.41</b>			
Duty to comply	Property rights	Reporting Requirements	
Duty to reapply	Duty to provide information	Planned change	
Need to halt or reduce activity	Inspections and entry	Anticipated noncompliance	
not a defense	Monitoring and records	Transfers	
Duty to mitigate	Signatory requirement	Monitoring reports	
Proper O & M	Bypass	Compliance schedules	
Permit actions	Upset	24-Hour reporting	
		Other non-compliance	
2. Does the permit contain the additional standard condition (or the State equivalent or more stringent conditions) for POTWs regarding notification of new introduction of pollutants and new industrial users [40 CFR 122.42(b)]?	X		

## Part II. NPDES Draft Permit Checklist

### Region III NPDES Permit Quality Review Checklist – For Non-Municipals (To be completed and included in the record for all non-POTWs) **not applicable**

#### II.A. Permit Cover Page/Administration

	Yes	No	N/A
1. Does the fact sheet <b>or</b> permit describe the physical location of the facility, including latitude and longitude (not necessarily on permit cover page)?			
2. Does the permit contain specific authorization-to-discharge information (from where to where, by whom)?			

#### II.B. Effluent Limits - General Elements

	Yes	No	N/A
1. Does the fact sheet describe the basis of final limits in the permit (e.g., that a comparison of technology and water quality-based limits was performed, and the most stringent limit selected)?			
2. Does the fact sheet discuss whether “antibacksliding” provisions were met for any limits that are less stringent than those in the previous NPDES permit?			

#### II.C. Technology-Based Effluent Limits (Effluent Guidelines & BPJ)

	Yes	No	N/A
1. Is the facility subject to a national effluent limitations guideline (ELG)?			
a. If yes, does the record adequately document the categorization process, including an evaluation of whether the facility is a new source or an existing source?			
b. If no, does the record indicate that a technology-based analysis based on Best Professional Judgement (BPJ) was used for all pollutants of concern discharged at treatable concentrations?			
2. For all limits developed based on BPJ, does the record indicate that the limits are consistent with the criteria established at 40 CFR 125.3(d)?			
3. Does the fact sheet adequately document the calculations used to develop both ELG and /or BPJ technology-based effluent limits?			
4. For all limits that are based on production or flow, does the record indicate that the calculations are based on a “reasonable measure of ACTUAL production” for the facility (not design)?			
5. Does the permit contain “tiered” limits that reflect projected increases in production or flow?			
a. If yes, does the permit require the facility to notify the permitting authority when alternate levels of production or flow are attained?			
6. Are technology-based permit limits expressed in appropriate units of measure (e.g., concentration, mass, SU)?			

*not applicable*

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**II.C. Technology-Based Effluent Limits (Effluent Guidelines & BPJ) – cont.**

	Yes	No	N/A
7. Are all technology-based limits expressed in terms of both maximum daily, weekly average, and/or monthly average limits?			
8. Are any final limits less stringent than required by applicable effluent limitations guidelines or BPJ?			

II.D. Water Quality-Based Effluent Limits

	Yes	No	N/A
1. Does the permit include appropriate limitations consistent with 40 CFR 122.44(d) covering State narrative and numeric criteria for water quality?			
2. Does the record indicate that any WQBELs were derived from a completed and EPA approved TMDL?			
3. Does the fact sheet provide effluent characteristics for each outfall?			
4. Does the fact sheet document that a “reasonable potential” evaluation was performed?			
a. If yes, does the fact sheet indicate that the “reasonable potential” evaluation was performed in accordance with the State’s approved procedures?			
b. Does the fact sheet describe the basis for allowing or disallowing in-stream dilution or a mixing zone?			
c. Does the fact sheet present WLA calculation procedures for all pollutants that were found to have “reasonable potential”?			
d. Does the fact sheet indicate that the “reasonable potential” and WLA calculations accounted for contributions from upstream sources (i.e., do calculations include ambient/background concentrations where data are available)?			
e. Does the permit contain numeric effluent limits for all pollutants for which “reasonable potential” was determined?			
5. Are all final WQBELs in the permit consistent with the justification and/or documentation provided in the fact sheet?			
6. For all final WQBELs, are BOTH long-term (e.g., average monthly) AND short-term (e.g., maximum daily, weekly average, instantaneous) effluent limits established?			
7. Are WQBELs expressed in the permit using appropriate units of measure (e.g., mass, concentration)?			
8. Does the fact sheet indicate that an “antidegradation” review was performed in accordance with the State’s approved antidegradation policy?			

**not applicable**

II.E. Monitoring and Reporting Requirements

	Yes	No	N/A
1. Does the permit require at least annual monitoring for all limited parameters?			
a. If no, does the fact sheet indicate that the facility applied for and was granted a monitoring waiver, AND, does the permit specifically incorporate this waiver?			
2. Does the permit identify the physical location where monitoring is to be performed for each outfall?			
3. Does the permit require testing for Whole Effluent Toxicity in accordance with the State's standard practices?			

II.F. Special Conditions

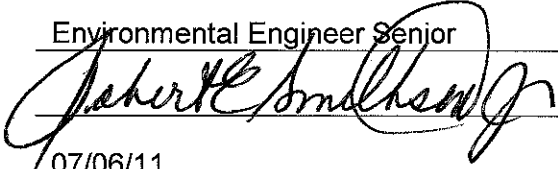
	Yes	No	N/A
1. Does the permit require development and implementation of a Best Management Practices (BMP) plan or site-specific BMPs?			
a. If yes, does the permit adequately incorporate and require compliance with the BMPs?			
2. If the permit contains compliance schedule(s), are they consistent with statutory and regulatory deadlines and requirements?			
3. Are other special conditions (e.g., ambient sampling, mixing studies, TIE/TRE, BMPs, special studies) consistent with CWA and NPDES regulations?			

II.G. Standard Conditions

II.G. Standard Conditions	Yes	No	N/A
1. Does the <b>permit</b> contain all 40 CFR 122.41 standard conditions or the State equivalent (or more stringent) conditions?			
<b>List of Standard Conditions – 40 CFR 122.41</b>			
Duty to comply	Property rights	Reporting Requirements	
Duty to reapply	Duty to provide information	Planned change	
Need to halt or reduce activity	Inspections and entry	Anticipated noncompliance	
not a defense	Monitoring and records	Transfers	
Duty to mitigate	Signatory requirement	Monitoring reports	
Proper O & M	Bypass	Compliance schedules	
Permit actions	Upset	24-Hour reporting	
		Other non-compliance	
2. Does the permit contain the additional standard condition (or the State equivalent or more stringent conditions) for existing non-municipal dischargers regarding pollutant notification levels [40 CFR 122.42(a)]?			

### Part III. Signature Page

Based on a review of the data and other information submitted by the permit applicant, and the draft permit and other administrative records generated by the Department/Division and/or made available to the Department/Division, the information provided on this checklist is accurate and complete, to the best of my knowledge.

Name	<u>Robert E. Smithson, Jr.</u>
Title	<u>Environmental Engineer Senior</u>
Signature	<u></u>
Date	<u>07/06/11</u>

ATTACHMENT 11  
CHRONOLOGY SHEET

## CHRONOLOGY OF EVENTS

APPLICATION RECEIVED	APPLICATION RETURNED	ADDITIONAL INFO REQUESTED	APPLICATION/ADD INFO DUE BACK IN RO	APPLICATION/ADD. INFO RECEIVED
05/12/11	05/19/11	05/19/11	06/01/11	06/01/11
APPLICATION TO VDH: 05/31/11 VDH COMMENTS RECEIVED: 06/21/11				
DSS COMMENTS RECEIVED: 06/28/11 OWPS COMMENTS RECEIVED: N/A				
APPLICATION ADMIN. COMPLETE: 06/01/11 APPLICATION TECH. COMPLETE: 06/28/11				
DATE FORWARDED TO ADMIN:				

Date            DESCRIPTIVE STATEMENT [CHRONOLOGY OF EVENTS] (Meetings, telephone calls, letters, memos,  
hearings, etc. affecting permit from application to issuance)

[illegible]

ATTACHMENT 12  
CORRESPONDENCE





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# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF ENVIRONMENTAL QUALITY

### TIDEWATER REGIONAL OFFICE

5636 Southern Boulevard, Virginia Beach, Virginia 23462

(757) 518-2000 Fax (757) 518-2009

[www.deq.virginia.gov](http://www.deq.virginia.gov)

Doug Domenech  
Secretary of Natural Resources

David K. Paylor  
Director

July 12, 2011

Mr. Todd Burbage, Vice-President  
Sunset Bay Utilities, Inc.  
9428 Stephen Decatur Highway  
Berlin, MD 21811

RE: VPDES Permit Reissuance VA0054003  
Sunset Bay Utilities South Wastewater Treatment Plant  
Chincoteague, VA

Dear Mr. Burbage:

Your revised application received June 01, 2011 has been reviewed and it appears to be complete. Other reviews of the application will be required by state agencies to ensure that public health and the environment will be protected.

The next steps involve assembling the information necessary to develop the permit limitations and then drafting the permit. Once the draft permit is prepared and the appropriate reviews are performed, I will transmit the draft permit and supporting documentation to you for review.

Thank you for your cooperation and that of your consultant in submitting the completed application. If you have any questions about our procedures or the status of your draft permit, please feel free to call me at (757) 518-2106.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert E. Smithson".

Robert E. Smithson  
Environmental Engineer Senior

cc: DEQ ECM File  
Mr. Don Hearl, ESS (Consultant)



# COMMONWEALTH of VIRGINIA

## Department of Health DIVISION OF SHELLFISH SANITATION

109 Governor Street, Room 614-B  
Richmond, VA 23219

Ph: 804-864-7487  
Fax: 804-864-7481

### MEMORANDUM

**DATE:** 6/28/2011  
**TO:** Robert E. Smithson, Jr.  
Department of Environmental Quality  
**FROM:** B. Keith Skiles, MPH, Classification Chief  
Division of Shellfish Sanitation

**SUBJECT:** Sunset Bay Utilities South

City / County: Accomack

Waterbody: Chincoteague Channel

Type: ☒ VPDES ☐ VMRC ☐ VPA ☐ VWP ☐ JPA ☐ Other:

Application / Permit Number: VA0054003

- ☐ The project will not affect shellfish growing waters.
- ☐ The project is located in approved shellfish growing waters, however, the activity as described will not require a change in classification.
- ☒ The project is located in condemned shellfish growing waters and the activity, as described, will not cause an increase in the size or type of the existing closure.
- ☐ The project will affect condemned shellfish waters and will not cause an increase in the size of the total condemnation. However, a prohibited area (an area from which shellfish relay to approved waters for self-purification is not allowed) will be required within a portion of the currently condemned area. See comments.
- ☐ A buffer zone (including a prohibited area) has been previously established in the vicinity of this discharge, however, the closure will have to be revised. Map attached.
- ☐ This project will affect approved shellfish waters. If this discharge is approved, a buffer zone (including a prohibited area) will be established in the vicinity of the discharge. Map attached.
- ☐ Other.

ADDITIONAL  
COMMENTS:

Area #: 101

bks



# COMMONWEALTH of VIRGINIA

Karen Remley, MD, MBA, FAAP  
State Health Commissioner

DEPARTMENT OF HEALTH

## OFFICE OF DRINKING WATER

Southeast Virginia Field Office

J. Wesley Kleene, PhD, PE  
Director, Office of Drinking Water

830 Southampton Avenue  
Suite 2058  
Norfolk, VA 23510  
Phone (757) 683-2000  
Fax (757) 683-2007

### MEMORANDUM

**TO:** Robert E. Smithson Jr.  
Environmental Engineer Senior  
Department of Environmental Quality – Tidewater Regional Office

**DATE:** JUN 20 2011

**FROM:** Daniel B. Horne, PE  
Engineering Field Director *DBH*



**CITY/COUNTY:** Accomack

**PROJECT TYPE:** ☐ New ☒ Renewal or Revision

☒ VPDES ☐ VPA ☐ VWPP ☐ JPA ☐ Other: \_\_\_\_\_

☒ Number: VA 0054003

**OWNER/APPLICANT:** Sunset Bay/Environmental Systems Service, Ltd.

**PROJECT:** Sunset Bay Subdivision

- ☒ There are no public water supply raw water intakes located within 15 miles downstream or within one tidal cycle upstream of the existing project.
- ☐ The raw water intake for the \_\_\_\_\_ waterworks is located \_\_\_\_\_ miles [downstream/upstream] of the discharge. This should be a sufficient distance to minimize the impacts of the discharge. We recommend a minimum Reliability Class of \_\_\_\_\_ for this facility.
- ☐ The raw water intake for the \_\_\_\_\_ waterworks is located \_\_\_\_\_ miles [downstream/upstream (within one tidal cycle)] of the discharge.
- ☐ Please forward a copy of the Draft Permit for our review and comment.
- ☐ Comments:

Prepared by:

*Dixon W. Tucker*  
Dixon W. Tucker, PE  
District Engineer

pc: V.D.H. - Office of Drinking Water, Field Services Engineer

R:\DIST22\Accomack\DEQ Permits\2011\SunsetBay\DEQpermitJune2011.docxR:\DIST22\Accomack\DEQ Permits\2011\SunsetBay\DEQpermitJune2011.docx

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## Smithson Jr., Robert (DEQ)

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**From:** Smithson Jr., Smithson,Robert (DEQ)  
**Sent:** Monday, May 23, 2011 2:38 PM  
**To:** 'valeriac@ess-services.com'  
**Subject:** Sunset Bay South - Revised Public Notice Billing Authorization Needed

One last thing on this Val. The referenced document you sent with the application with Todd Burbage's signature listed wrong newspaper (Chincoteague Beacon). Needs to say Eastern Shore News. You can either revise the page and have him resign or send me a note citing the error and that Mr. Burbage is authorizing PN in the Eastern Shore News. Thanks

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**From:** Smithson Jr., Smithson,Robert (DEQ)  
**Sent:** Thursday, May 19, 2011 1:50 PM  
**To:** 'valeriac@ess-services.com'  
**Subject:** FW: Pages 9 and 15 (Sunset Bay)

Just an FYI reminder: we still need all the documents (below) before the application can be considered complete.

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**From:** Smithson Jr., Smithson,Robert (DEQ)  
**Sent:** Tuesday, May 10, 2011 2:14 PM  
**To:** 'valeriac@ess-services.com'  
**Subject:** RE: Pages 9 and 15 (Sunset Bay)

Valerie, we would also like a copy of facility/owners SCC registration

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**From:** Valeria Compton [<mailto:valeriac@ess-services.com>]  
**Sent:** Tuesday, May 10, 2011 2:06 PM  
**To:** Smithson Jr., Smithson,Robert (DEQ)  
**Subject:** RE: Pages 9 and 15 (Sunset Bay)

I will take care of it and get them to you.

Val

---

**From:** Smithson Jr., Smithson,Robert (DEQ) [<mailto:Robert.SmithsonJr@deq.virginia.gov>]  
**Sent:** Tuesday, May 10, 2011 2:00 PM  
**To:** [valeriac@ess-services.com](mailto:valeriac@ess-services.com)  
**Subject:** RE: Pages 9 and 15 (Sunset Bay)

Hi Valerie, reviewed application and need the following:

1. We are still missing pages- Missing pages 10-14 of sludge form
2. EPA Form 1 needs corrections for items A.(private) and E.(OMITTED) and item 56 under status of operator (P for

private). Also on XII (residential community) provide status of if/when second train was/will be built.

3. Need original signature pages for all and all original maps/hauling routes (copies not good)

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4. Need updated copy of financial assurance/closure plan and current instrument (approval letter). Application is

incomplete without it.

5. All blank pages of any form need N/A to appear on each. Revisit pages on form 2A in particular

Let me know if you have questions

-----Original Message-----

From: Valeria Compton [<mailto:valeriac@ess-services.com>]

Sent: Thursday, May 05, 2011 1:17 PM

To: Smithson Jr., Smithson, Robert (DEQ)

Subject: Pages 9 and 15 (Sunset Bay)

Let me know if you need anything else.....Val

**Smithson Jr., Robert (DEQ)**

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**To:** Horne, Daniel (VDH); Howell, Beth (MRC); Stagg, Ben (MRC); Skiles, Keith (VDH)  
**Subject:** Permit Application for Review-Permit # VA0054003: Sunset Bay Utilities South WWTP, Chincoteague VA  
**Attachments:** VA0054003VMRC ltr.pdf; VA0054003 app 2011.pdf; VA0054003 VDH ltr.pdf; VA0054003 DSS ltr.pdf

Attached is a link to the FTP site to access a permit application for your review. Under the folder for the facility listed above on the FTP site, there is a letter for each agency and the permit application. Please pull the information that you need off the FTP site or reference the attachments here.

If you have any questions, please contact me.

<ftp://ftp.deq.virginia.gov/wps/PERMIT/TRO/VDH,%20DSS,%20VMRC%20For%20Review/VA0054003%20Sunset%20Bay%20Utilities%20South%20WWTP/>

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## STATE CORPORATION COMMISSION

Richmond, June 23, 2006

*This is to certify that the certificate of incorporation of*

**SUNSET BAY UTILITIES, INC.**

*was this day issued and admitted to record in this office and that the said corporation is authorized to transact its business subject to all Virginia laws applicable to the corporation and its business. Effective date: June 23, 2006*



State Corporation Commission

Attest:

*Joel H. Beck*  
Clerk of the Commission

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**Smithson Jr., Smithson,Robert (DEQ)**

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**From:** Smithson Jr., Smithson,Robert (DEQ)  
**Sent:** Tuesday, May 10, 2011 2:00 PM  
**To:** 'valeriac@ess-services.com'  
**Subject:** RE: Pages 9 and 15 (Sunset Bay)

Hi Valerie, reviewed application and need the following:

1. We are still missing pages- Missing pages 10-14 of sludge form
2. EPA Form 1 needs corrections for items A.(private) and E.(OMITTED) and item 56 under status of operator (P for private). Also on XII (residential community) provide status of if/when second train was/will be built.
3. Need original signature pages for all and all original maps/hauling routes (copies not good)
4. Need updated copy of financial assurance/closure plan and current instrument (approval letter). Application is incomplete without it.
5. All blank pages of any form need N/A to appear on each. Revisit pages on form 2A in particular

Let me know if you have questions

-----Original Message-----

**From:** Valeria Compton [<mailto:valeriac@ess-services.com>]  
**Sent:** Thursday, May 05, 2011 1:17 PM  
**To:** Smithson Jr., Smithson,Robert (DEQ)  
**Subject:** Pages 9 and 15 (Sunset Bay)

Let me know if you need anything else.....Val



66-  
**Smithson Jr., Smithson,Robert (DEQ)**

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**From:** Valeria Compton [valeriac@ess-services.com]  
**Sent:** Friday, April 01, 2011 3:22 PM  
**To:** Smithson Jr., Smithson,Robert (DEQ)  
**Subject:** RE: Reissuance : VPDES Applications Due For Oak Hall Shopping Center and Sunset Bay South

I have them on my calendar.....Have a wonderful weekend.

Val

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**From:** Smithson Jr., Smithson,Robert (DEQ) [mailto:Robert.SmithsonJr@deq.virginia.gov]  
**Sent:** Friday, April 01, 2011 3:00 PM  
**To:** valeriac@ess-services.com; donh@ess-services.com  
**Cc:** McConathy, James (DEQ)  
**Subject:** Reissuance : VPDES Applications Due For Oak Hall Shopping Center and Sunset Bay South

Hi Valerie,

Just a reminder that the application for reissuance of Sunset Bay South (VA0054003) is due May 9, 2011 and Oak Hall Shopping Center (VA0090875) is due June 3, 2011. Please respond by telling me that you have these dates on your calendar and that everything at your end is proceeding along just fine and you don't anticipate any problems to meet those submittal dates. At least that's how I hope you'll respond. It's Friday and I wouldn't like bad news ...

Let me know too if you are encountering any problems. Thanks. Have a good weekend..